



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,282	03/18/2004	Scott A. Wojan	WOJ-100-A	5647
7590	04/15/2005			EXAMINER VERBITSKY, GAIL KAPLAN
Thomas E. Bejin Young & Basile, P.C. Suite 624 3001 West Big Beaver Road Troy, MI 48084			ART UNIT 2859	PAPER NUMBER
DATE MAILED: 04/15/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/803,282	WOJAN ET AL. 
	Examiner	Art Unit
	Gail Verbitsky	2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on ____.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-50 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-50 is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. ____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>11/26/2004</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input checked="" type="checkbox"/> Other: <u>four attachments</u> .

DETAILED ACTION

Claim Objections

1. Claims 20, 22-23, 25, 35, 37 are objected to because of the following informalities:

Claims 20, 25: perhaps applicant should replace "so long" in line 2 with --as long--and "falls" in line 3 with --stays--. Is this a proper interpretation of the invention?

Claims 22 and 37: perhaps applicant should replace "so long" in line 2 with --as long-- and "is" in line 2 with --stays--. Is this a proper interpretation of the invention?

Claim 23: "the controller" in line 1 lacks antecedent basis.

Claim 25" "within[g]" in line 3 should be replaced with --within--.

Claims 20, 35: Perhaps applicant should replace "series of pulses" in line 2 with --series tones, in order to maintain consistency throughout the claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Park (U.S. 6133559).

Park discloses in Figs. 1, 3 a device comprising a housing (microwave oven) 1, a control device within the housing, an infrared temperature sensor 5 in operable

communication with the control device for detecting temperature of a food/ beverage 7 within the housing.

For claim 2: The infrared sensor 5, inherently, has a sensing/ viewing end to sense the temperature of the food/ beverage 7.

For claim 5: The housing has a display 6d operably, as shown in Fig. 3, connected to the control device/ portion 6e.

4. Claims 16, 30-31 is rejected under 35 U.S.C. 102(b) as being unpatentable over Chapman et al. (U.S. 6501384) [hereinafter Chapman].

Chapman discloses a device in the field of applicant's endeavor comprising all the limitations of claim 31, including a housing 10, a control device (circuit) within the housing, a temperature probe 48, a display 18, an audible (visual message/identifier) device operably connected to the control device (circuit), and a support member 52 having a substantially planar radially extending outward from the probe portion A having a lower portion B positioned away from a housing 10; and an upper portion C positioned closer to the housing 10. The support member is engageable with a rim of a vessel, as shown in Fig. 2. (The numerals A-C have been added by the Examiner, see attachment # 1 to the Office action).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3-7, 16-29, 31-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung et al. (U.S. 20030202558A1) [hereinafter Chung].

Chung discloses in Fig. 1 a food thermometer/ temperature monitor for detecting food temperature contained in a cooking vessel (grill, oven), the device comprises a housing 21, a control device/ circuit within the housing 21, a (infrared) temperature sensor (thermistor) located in a tip 26 and is operable to communicate with the control device for detecting/ viewing/ sensing the temperature/ heat IR light of the food contained in the vessel and being cooked.

For claims 3-4: the device comprising an audible device connected to the control device and producing a sound. Wherein, the sound is emitted at a predetermined temperature (test preference).

For claims 5-7: the device comprises and LCD display 53 for displaying temperature/ indicia and backlighting LED 94.

For claims 17-26: the sound is produced one or more (plurality of sounds) when one of a plurality of predetermined temperatures (test preferences/ doneness levels) has been reached. The sounds can be different frequency of tones or different sequence of tones, or different number of tones or different patterns of tones that is associated with each preselected temperature (level of doneness). The operator can stop the sound alert by manually pressing a stop button 81. This would imply that the audible sound would sound as long as the detected temperature stays within each predetermined (desired) range till the operator turn it on. The audible alarm sound when the food is pre-done,

done and over done. The tones can be produced in a form of a sound beep (pulses).

For example, the pre-done alert can produce two beeps (series of pulses), the done alert can produce four audible beeps (series of pulses), etc. The operator can stop the

For claim 23-24, 26: the plurality of temperature ranges (predetermined temperatures) corresponding to a plurality heating stages identified as test preferences (well done, rare, etc.), are stored in the device test preferences / predetermined temperatures are stored in the device. The control device is configured to emit sound associated with different heating stages (taste preferences) corresponding to the detected temperature.

For claim 31: the control device is capable to compare the detected temperature with each of the predetermined temperatures and to determine which taste preference the detected temperature falls within, so as to properly display a rare preference (well done, rare, etc.) to be displayed.

With respect to the preamble of claims: the preamble of the claims does not provide enough patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and a portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. Kropa v. Robie, 88 USPQ 478 (CCPA 1951).

7. Claims 1, 5, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tymkewicz et al. (U.S. 6000845) [hereinafter Tymkewicz].

Tymkewicz discloses in Figs. 1-2 an electronic food thermometer/ temperature monitor for detecting temperature of a food contained within a vessel/ grill/ oven,

comprising a housing 10, a control device (electronic circuits) enclosed within the housing, an infrared temperature sensor (thermocouple or thermistor) 32 in a tip 21 for detecting/ sensing/ viewing temperature/ heat/ IR radiation/ IR light of the food. The thermometer has a LCD display 24 operably connected to the control device. The device comprises a support member 21 attached to the temperature probe containing the infrared temperature sensor, the support member 21 having substantially planar portion A extending outward radially, as shown in Fig. 2. The support member 21 substantially coincides with the longitudinal axis of the temperature probe 14.

With respect to the preamble of claims: the preamble of the claims does not provide enough patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and a portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. Kropa v. Robie, 88 USPQ 478 (CCPA 1951).

(The numeral A has been added by the Examiner, see attachment # 2 to the Office action).

8. Claims 42, 44-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tymkewicz in view of DE 29916356U1 [hereinafter DE].

Tymkewicz discloses the device as stated above in paragraph 7..

Tymkewicz does not teach the particular support member, as stated in claims 44-47, 49-50.

Art Unit: 2859

DE discloses in Figs. 1-3 a device in the filed of applicant's endeavor comprising a mounting support (support member) 5, 7 for a beverage thermometer probe. The support member is a substantially flat removable disk, comprising a substantially planar portion 7 outwardly radially extending from the tube 2 of the thermometer.

The support member has its lower surface positioned toward the sensing device 3.

For claim 46: the principal (vertical) axis of the support member is substantially consides with the longitudinal (vertical) axis of the thermometer probe.

For claim 47: the longitudinal (vertical) axis of the thermometer probe intersects a centroid (central opening) of the support member.

For claim 42, 48: the support member 5, 7 has a substantially flat disc (planar portion) shape.

For claim 49: the support member 5, 7 is generally substantially perpendicular to the longitudinal axis of the thermometer probe.

For claims 44, 50: the removable support member is slidably movable along the surface of the thermometer probe.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the support member, disclosed by Tymkewicz, with the support member, as taught by DE, because both of them are alternate types of support member, which will perform the same function, of supporting the temperature probe onto the surface of interest, if one is replaced with the other.

9. Claims 1, 4-5, 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (U.S. 20020196838A1).

Lee discloses in Fig. 1 the device in the field of applicant's endeavor comprising support member 1 adjacent an IR (thermoresistor) sensor 71 and having a substantially planar portion 12 extending radially outward from the IR sensor 71 for supporting the temperature monitor onto a surface where the food of interest is positioned.

For claim 9: the substantially planar portion 12 of the support member 1 has an upper surface A positioned toward a housing (including display 6), and a lower surface B comprising a portion 131 positioned away from the housing, the lower portion B is engageable with a surface where the food of interest is.

For claim 11: a principal (vertical axis) of the support member 1 substantially coincides with the longitudinal (also vertical) axis of the IR 71 in a tube 7, as shown in Fig. 3.

For claim 13: the support member has/ comprises a substantially flat disk shape 12.

For claim 14: the substantially planar portion of the support member is aligned substantially perpendicular to the longitudinal axis (also vertical) of the IR 71 in the tube 7.

(The numerals A-B have been added by the Examiner, see attachment # 3 to the Office action).

With respect to the preamble of claims: the preamble of the claims does not provide enough patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and a portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. Kropa v. Robie, 88 USPQ 478 (CCPA 1951).

10. Claims 1, 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hofer (U.S. 4104916).

Hofer discloses in Figs. 1-3 a wine (beverage) thermometer/ monitor comprising a housing 12 having a display and a control device controlling converting data from an infrared/ temperature sensing device 28 located in the tip of the temperature/ infrared sensor 20 into a temperature on the display.

Hofer also teaches a removable support member/ cover 64 for supporting the monitor upon a rim of a vessel 60.

For claim 9: The support member 64 comprises a substantially planar portion 68a radially extending outward from the infrared temperature sensor 20. The substantially planar portion 68a has an upper surface positioned toward the housing 12, and the lower surface 70, 72 positioned away from the housing, the lower surface being engageable with a rim of the vessel 60 so as to position the infrared sensor 20 such that the viewing/ sensing end has an unobstructed view/ contact of the beverage contained in the vessel 60.

For claim 10: the support member 64 has portion A which has a substantially arcuate shape forming a concave upper surface and a convex lower surface, as shown in Fig. 2, and in the attachment # 4 to the Office action.

For claim 11: a principal (vertical) axis of the support 64 coincides with the longitudinal (vertical) axis of the infrared temperature sensor 20.

For claim 12: the longitudinal (vertical) axis of the infrared temperature sensor 20 intersects a centroid (central opening) B of the support member 64.

For claim 13: the support member 64 has a substantially disk-shaped portion C.

For claim 14: the support member 64 is aligned (set) perpendicular to the longitudinal (vertical) axis of the infrared temperature sensor 20.

For claim 15: the support 64 is removably attached to the infrared temperature sensor 20.

With respect to the preamble of claims: the preamble of the claims does not provide enough patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and a portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. Kropa v. Robie, 88 USPQ 478 (CCPA 1951).

(The numeral A has been added by the Examiner, see attachment # 4 to the Office action).

11. Claims 3-4, 16-24, 26, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of Jung (U.S. 5550355).

Park discloses the device as stated above in paragraph 3.

Although, it is very well known in the art, that microwave ovens normally provide a sound alarm, Park is silent about the alarm.

Jung discloses the device in the field of applicant's endeavor comprising a sound alarm that sounds at a predetermined temperature.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add an audible alarm, as taught by Park, to the device

disclosed by Jung, so as to provide an audible alert to the operator, especially if the operator does not look at the monitor.

12. Claims 6-7, 16-21, 23-24, 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of Taino et al. (U.S. 20020158065A1) [hereinafter Taino].

Park discloses the device as stated above in paragraph 3.

Although, it is very well known in the art, that microwave ovens normally have LED or LCD displays, Park does not state whether the display is LED or LCD.

Taino discloses the device in the filed of applicant's endeavor comprising an LED or LCD display.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the display disclosed by Park, with the LED or LCD display, as taught by Taino, because both of them are alternate types of displays which will perform the same function of displaying temperature of the food/ beverage, if one is replaced with the other.

13. Claims 31-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park and Taino as applied to claims 6-7, 16-21, 23-24, 26-29 above, and further in view of Chung.

Park and Taino disclose the device as stated above in paragraph 12.

They do not teach the particular alarm, as stated in claims 31-41.

Chung discloses in Fig. 1 a food thermometer/ temperature monitor for detecting food temperature contained in a cooking vessel (grill, oven), the device comprises a

housing 21, a control device/ circuit within the housing 21, a (infrared) temperature sensor (thermistor) located in a tip 26 and is operable to communicate with the control device for detecting/ viewing/ sensing the temperature/ heat IR light of the food contained in the vessel and being cooked. The device comprising an audible device connected to the control device and producing a sound. Wherein, the sound is emitted at a predetermined temperature/ heating stage (test preference). The sound is produced one or more (plurality of sounds) when one of a plurality of predetermined temperatures/ test preferences/ doneness levels/ heating stages has been reached. The sounds can be different frequency of tones or different sequence of tones, or different number of tones or different patterns of tones that is associated with each preselected temperature (level of doneness). The operator can stop the sound alert by manually pressing a stop button 81. This would imply that the audible sound would sound as long as the detected temperature stays within each predetermined (desired) range till the operator turn it on. The audible alarm sound when the food is pre-done, done and over done.

The device also comprises and LCD display 53 for displaying temperature/ indicia/ identifier corresponding to the heating stage, and backlighting LED 94. The plurality of temperature ranges (predetermined temperatures) corresponding to a plurality heating stages identified as test preferences (well done, rare, etc.), are stored in the device test preferences / predetermined temperatures are stored in the device. The control device is configured to emit sound associated with different heating stages (taste preferences) corresponding to the detected temperature.

For claim 31: the control device is capable to compare the detected temperature with each of the predetermined temperatures and to determine which taste preference the detected temperature falls within, so as to properly display a preference/ identifier (well done, rare, etc.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device, disclosed by Park and Taino, so as to have the controller capable to perform all the functions, including the particular audio alarm, and the particular display displaying particular temperature and preferences, as taught by Chung, so as to keep the operator constantly aware of the status of the food being cooked, in order to take necessary actions.

14. Claims 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman et al. (U.S. 6501384) [hereinafter Chapman] in view of DE.

Chapman discloses the device as stated above in paragraph 4.

Chapman does not explicitly teach the limitations of claim 43.

DE discloses a device in the field of applicant's endeavor comprising a support member, as claimed by applicant in claim 43.

Therefeore, it would have been obvious to ne of ordinary skill in the art at the time the invention was made to replace the support member disclosed by Chapman, with the support member, as taught by DE, so as to support the device on a vessel rim especially when the vessel is a bottle-like vessel.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related devices and methods.

Devlin et al. US D457078S discloses a thermometer whose support member is of substantially flat disc-like shape.

Any inquiry concerning this communication should be directed to the Examiner Verbitsky who can be reached at (571) 272-2253 Monday through Friday 8:00 to 4:00 ET.

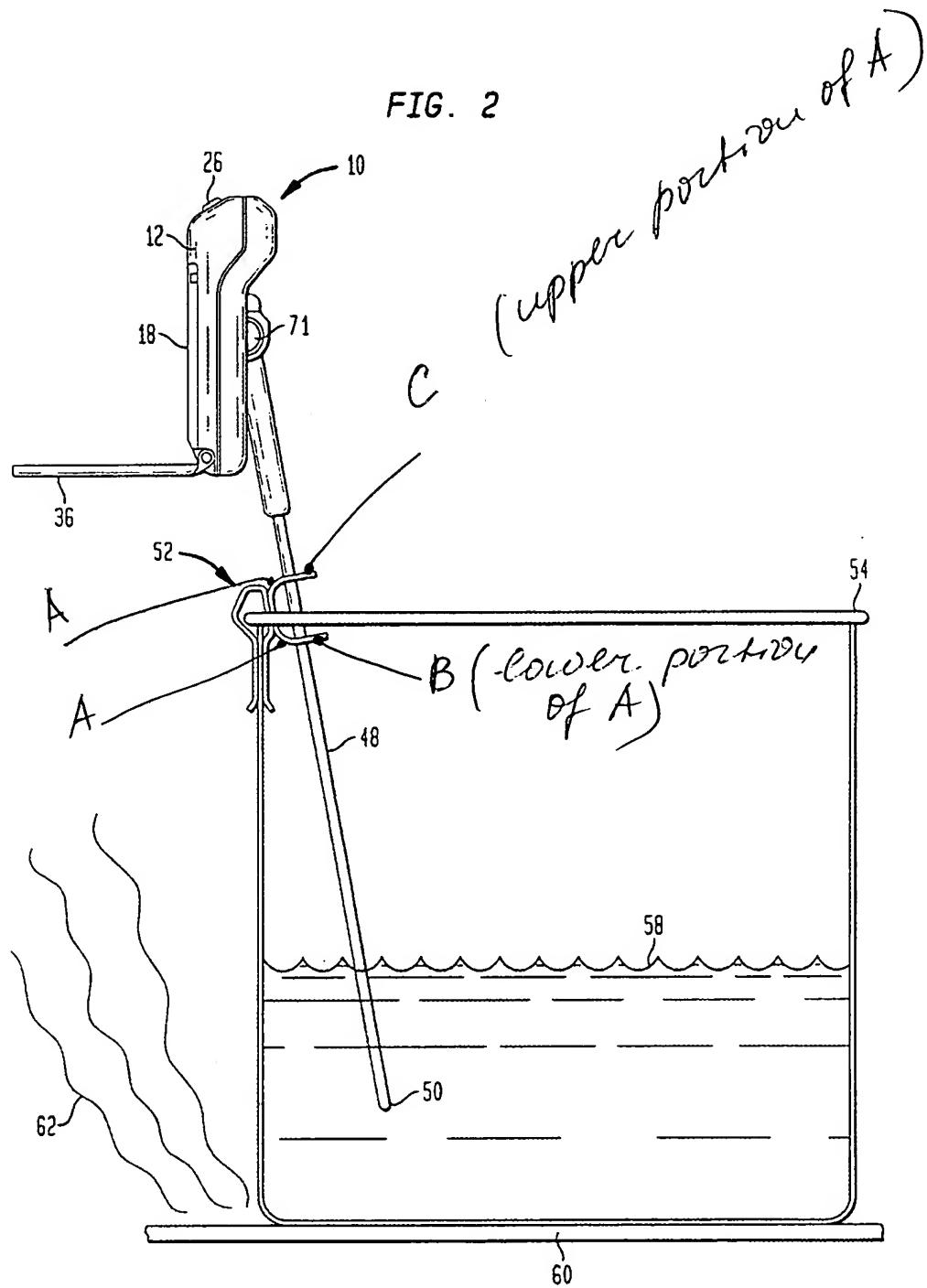
GKV

Gail Verbitsky
Primary Patent Examiner, TC 2800



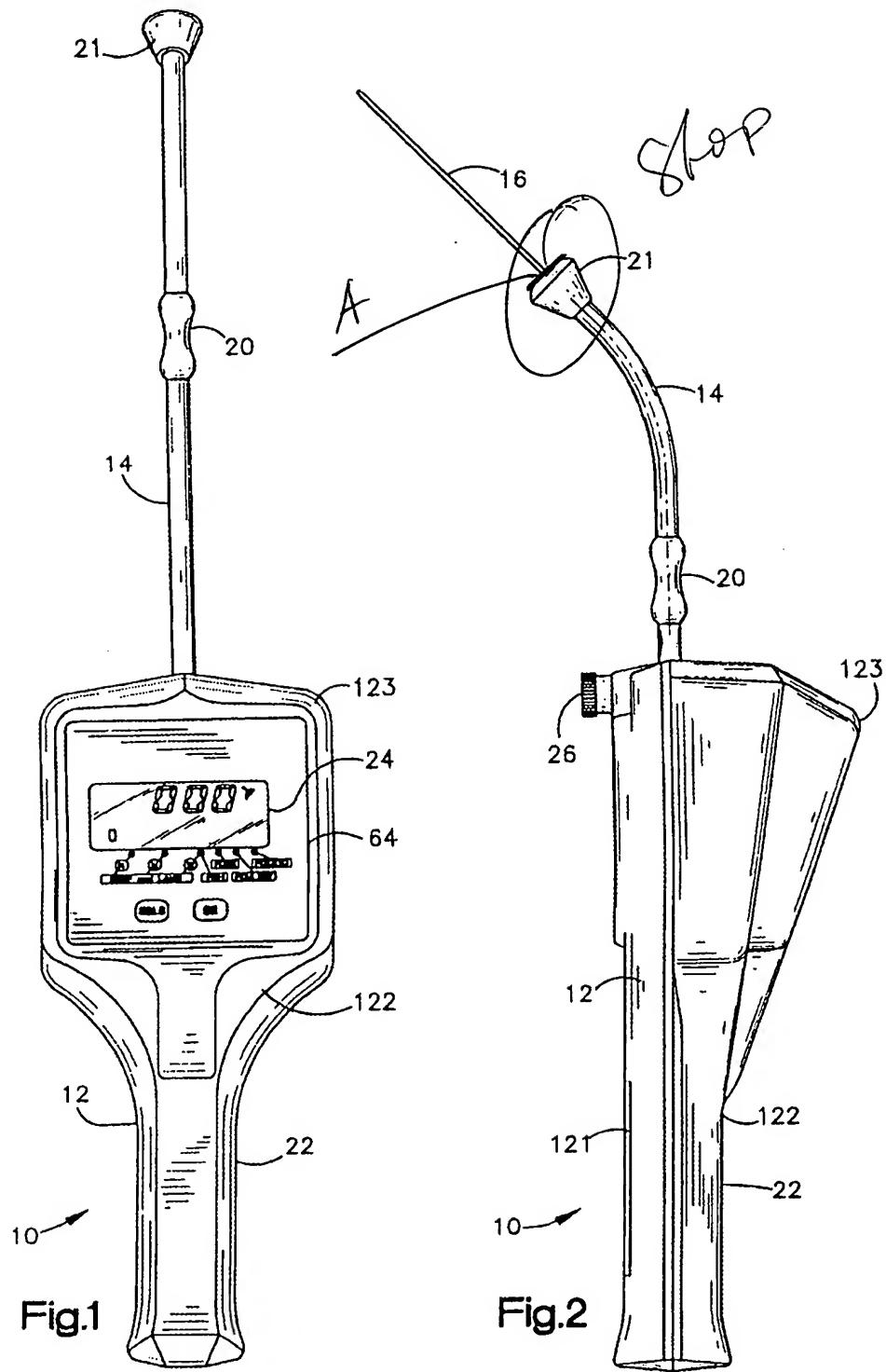
March 21, 2005

FIG. 2



Chapman

attachment # 1
(10803282, 03/21/05)



Tynkewicz

Attachment #2
(10803 282, 03/21/05)

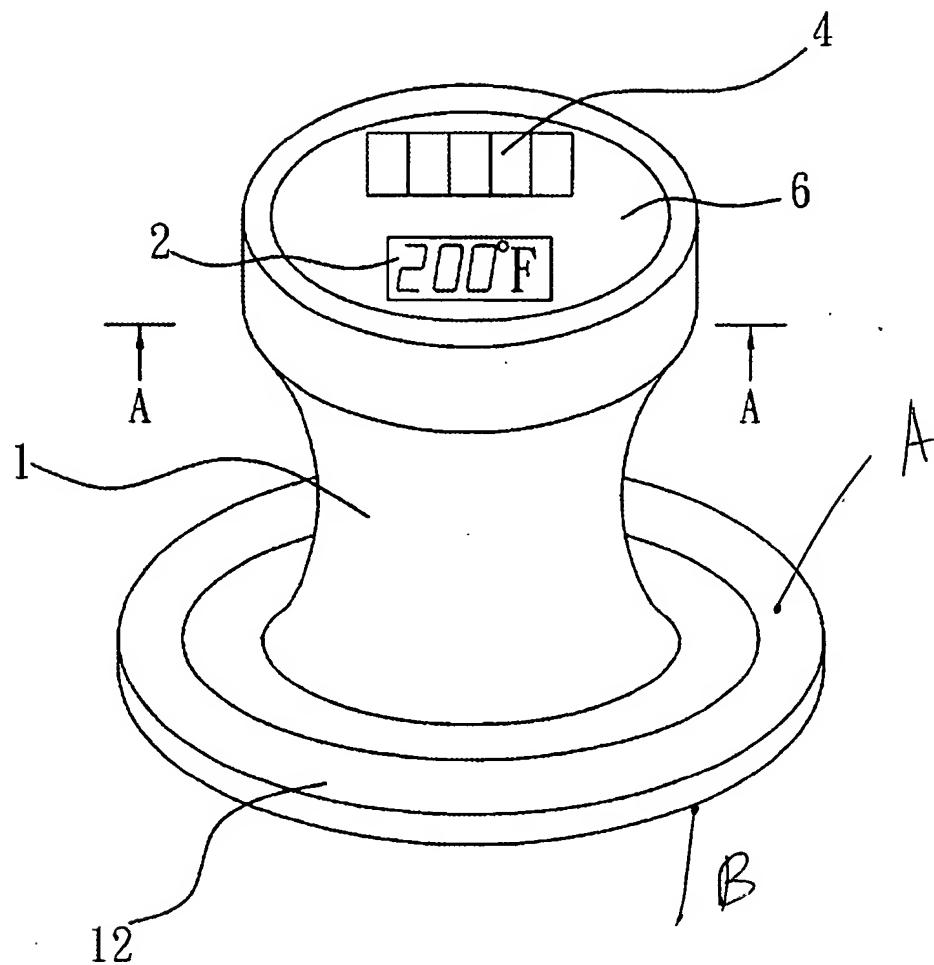


FIG. 1

Lee

attachment #3
(10803282, 03/21/05)

U.S. Patent

Aug. 8, 1978

4,104,916

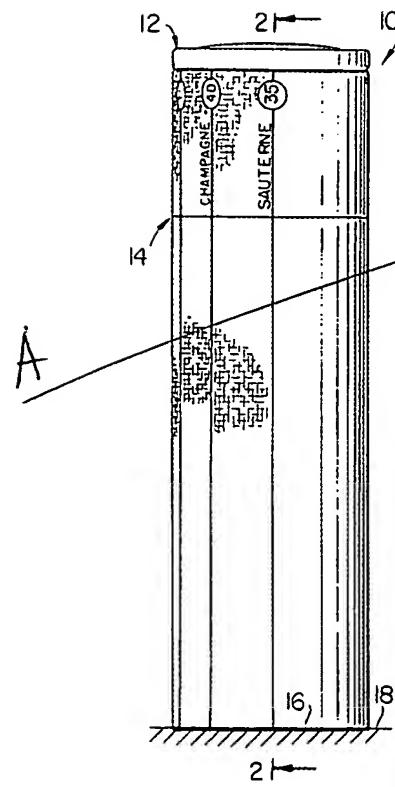


FIG. 1

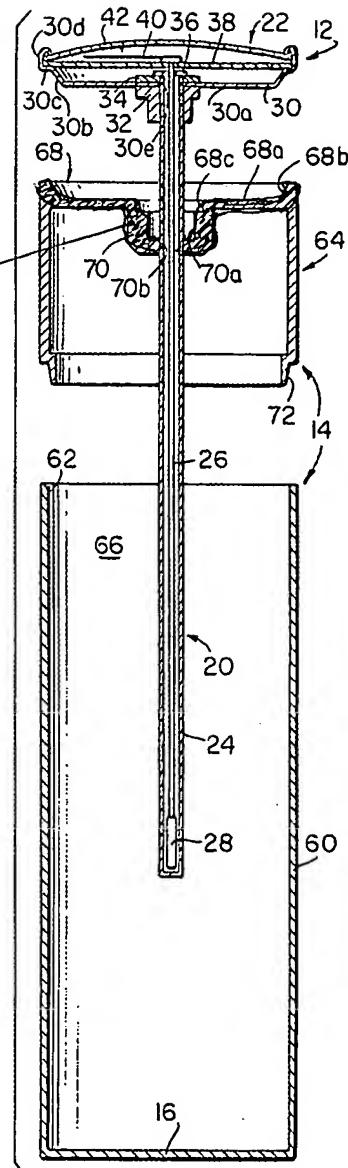


FIG. 2

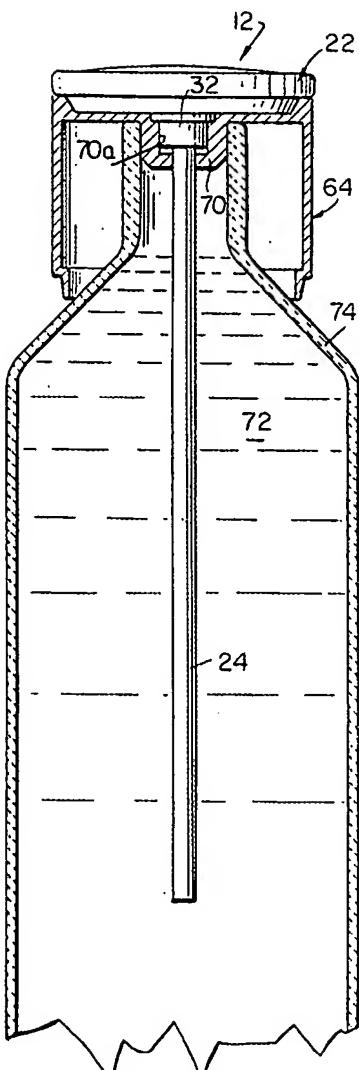


FIG. 3

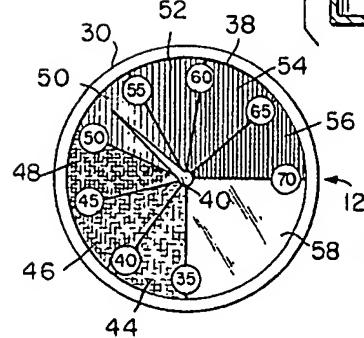


FIG. 4

Hofec

attachment # 4

(10803282, 103/21/05)